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(21) International Application Number: PCT/US98/08196 (22) International Filing Date: 24 April 1998 (24.04.98) (30) Priority Data: 60/044,810 25 April 1997 (25.04.97) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/044,810 (CIP) Filed on 25 April 1997 (25.04.97) (71) Applicant (for all designated States except US): THE UNIVERSITY OF IOWA RESEARCH FOUNDATION [US/US]; 100 Oakdale Campus No. 214 TIC, Iowa City, IA 52242-5000 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): ALVAREZ, Pedro, J. [-/-]; -TILL, Brian, A. [-/-]; -WEATHERS, Lenly, L. [-/-]; -PARKIN, Gene, F. [-/-]; -SCHNOOR, Jerald, L. [-/-]; - (74) Agent: MOORE, Mark, D.; Arnold, White & Durkee, P.O. Box 4433, Houston, TX 77210 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: FE(O)-BASED BIOREMEDIATION OF AQUIFERS CONTAMINATED WITH MIXED WASTES (57) Abstract <p>Disclosed are methods, devices and apparatus for bioremediation of mixed waste aquifers, based on a synergistic combination of reductive treatment using zero-valent iron and anaerobic biotransformations. Also disclosed are methods for <i>in situ</i> and <i>ex situ</i> remediation of groundwater and wastewater <i>via</i> these iron-bacterial compositions in a variety of devices including batch reactors, permeable and semipermeable reactive barriers, flow-through reactors, fluidized bed reactors, and sediment tanks.</p>		